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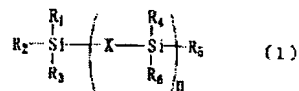
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TITLE : NONAQUEOUS ELECTROLYTE AND
NONAQUEOUS ELECTROLYTE
SECONDARY BATTERY USING THE
SAME



(式中、 $R_1 \sim R_6$ はアルキル基、アルコキシ基、アルケニル基、アルケニルオキシ基、アルキニル基、アルキニルオキシ基、アリール基又はアリールオキシ基を示し、これらの基は鎖中にエーテル結合を有していても良い。 n は0～5を示し、 n が1～5の時、 X は直接結合、酸素原子、アルキレン基、アルキレンジオキシ基、アルケニレン基、アルケニレンジオキシ基、アルキニレン基、アルキニレンジオキシ基、アリーレン基又はアリーレンジオキシ基を示す。但し、 $R_1 \sim R_6$ および X の少なくとも1つは不飽和結合含有基を示す)

ABSTRACT : PROBLEM TO BE SOLVED: To provide a nonaqueous electrolyte and a nonaqueous electrolyte secondary battery, using the electrolyte having superior cycle characteristics and low-temperature characteristics, in which the rate of change of the electric capacity and internal resistance are small during charging and discharging repetition, and the increase in the internal resistance at a lower temperature is small, thereby maintaining high electric capacity.

SOLUTION: This electrolyte, including an electrolyte salt dissolved in an organic solvent, contains a silicon compound having unsaturated bond represented in Formula (1) (wherein R_1 to R_6 represent alkyl group, alkoxy group, alkenyl group, alkenyloxy group, alkynyl group, alkynyloxy group, aryl group or aryloxy group; these groups may have ether bond in a chain i and n is 0 to 5, when n is 1 to 5; X represents direct bond, oxygen atom, alkylene group, alkylenedioxy group, alkenylene group, alkenylenedioxy group, alkynylene group, alkynylendioxy group, arylene group, or arylenedioxy group, where at least one of R_1 to R_6 and X represent unsaturated bond containing group.).

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